

LISTING OF THE CLAIMS

1 (currently amended): A highly corrosion-resistant hot-dip galvanized steel product excellent in surface smoothness and formability, having on the steel product surface a zinc alloy plating layer composed of 4 to 10% by mass of Al, 1 to 5% by mass of Mg, up to 0.1% by mass of Ti and the balance of Zn and unavoidable impurities, the plating layer having a metal structure in which one or more of the [Al phase], [Zn₂Mg phase] and [Zn phase] are present in a mixture in the matrix of an [Al/Zn/Zn₂Mg ternary eutectic structure], and the plating layer containing a Ti-Al base intermetallic compound composed of TiAl₃ in one or more of the [Al phase], [Zn₂Mg phase] and [Zn phase]..

2 (currently amended): A highly corrosion-resistant hot-dip galvanized steel product excellent in surface smoothness and formability, having on the steel product surface a zinc alloy plating layer composed of 4 to 22% by mass of Al, 1 to 5% by mass of Mg, up to 0.1% by mass of Ti, up to 0.5% by mass of Si and the balance of Zn and unavoidable impurities, the plating layer of the plated steel product having a metal structure in which an [Mg₂Si phase], an [Al phase], a [Zn₂Mg phase] and a [Zn phase] are present in a mixture in the matrix of an [Al/Zn/Zn₂Mg ternary eutectic structure], and the plating layer containing a Ti-Al base intermetallic compound composed of Ti (Al_{1-x}Si_x)₃ (wherein X = 0 to 0.5) in one or more of the [Al phase], [Zn₂Mg phase] and [Zn phase].

Claims 3 to 6: (canceled).

7 (currently amended): The highly corrosion-resistant hot-dip galvanized steel product excellent in surface smoothness and formability according to ~~any one of claims 1 to 4~~ claim 1 or 2, wherein the Ti-Al base intermetallic compound contained in an [Al phase] in the plating layer is present in a Zn-Al eutectoid reaction structure in which Zn phases are condensed.

8 (currently amended): The highly corrosion-resistant hot-dip galvanized steel product excellent in surface smoothness and formability according to ~~any one of claims 1 to 4~~ claim 1 or 2, wherein the size of a dendrite in an [Al phase] in the plating layer is up to 500 μm .

Claim 9: (canceled).

10 (new): A highly corrosion-resistant hot-dip galvanized steel product excellent in surface smoothness and formability, having on the steel product surface a zinc alloy plating layer composed of 4 to 22% by mass of Al, 1 to 5% by mass of Mg, up to 0.1% by mass of Ti, up to 0.5% by mass of Si and the balance of Zn and unavoidable impurities, the plating layer of the plated steel product having a metal structure in which an $[\text{Mg}_2\text{Si}]$ phase, an [Al phase] and a [Zn phase] are present in a mixture in the matrix of an [Al/Zn/ Zn_2Mg ternary eutectic structure], and the plating layer containing a Ti-Al base intermetallic compound composed of $\text{Ti}(\text{Al}_{1-x}\text{Si}_x)_3$ (wherein $X = 0$ to 0.5) in one or more of the [Al phase] and [Zn phase].